



IGT Systems™

Interface Specification – OpenPOS 2.0.2

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1.0 Document Reference

1.1 Version Control Information

Version	Date	Modification History	Modified by
1.0	22-10-2012	Renamed reserved field and it now returns the player's site ID	Lee Heng

2.0 Overview

2.1 Objective

The objective of this document is to define the interface between IGT Gaming Systems host and an OEM (Other Equipment Manufacturer) system. This interface is specifically designed to allow any OEM system to utilize its facilities.

3.0 Functional/Design Specifications

3.1 Functions

3.1.1 API-Support Commands

The IGT Systems Application Interface supports the following commands:

3.1.1.1 API Commands

Code	Command Name	Manual Reference
020	POS Patron Points Inquiry	Section 3.1.2
028	POS Redeem Points	Section 3.1.3
030	POS Post Retail Rating	Section 3.1.4

Table 1: API Commands

All commands are initiated by the external POS (Point of Sale) workstation.

3.1.1.2 Command Request Header Sent to the IGT System

#	Field	Type	Format	Description
1	Station Number	integer	99999	Unique identifier of workstation making request. Location (Till #)
2	Transaction Number	integer	99999999	Transaction sequence number. The transaction number sequence number is a counter that is initialized and incremented by the OEM system. The transaction number sequence number is initially set to 1 and should wrap back to 1 after a maximum of 99999999 is reached. The IGT system uses this number and API command code to detect duplicates. If the IGT system receives a message containing the same transaction sequence number and API command code as the previous message, it respond with 'duplicate request' (return code = 6)
3	API Command Code	integer	999	IGT Systems API command code.
4	Access Key	character	x(4)	The IGT Systems access keys are specific to the property and IGT Systems command code being used. The access keys are available from IGT upon request and are unique for each command code.
5	Transaction Date	date	dd/mm/yyyy	Transaction date.
6	Transaction Time	time	hh:mm:ss	Transaction time.

Table 2: Command Request Header Sent to the IGT System

3.1.1.3 Access Key Values

Command Description	Access Key Value	System Value
Points Balance	?020	Encoded in IGT System
Redemption	?028	Encoded in IGT System
Accrual	?030	Encoded in IGT System

Note: The question mark (?) in the "Access Key Value" is an encoded value that will be supplied to the OEM provider from IGT Systems.

Note Also: All commands are initiated by the workstation.

3.1.1.4 ACK Header Received from IGT System

Each command response sent by the IGT System to the workstation must include the following header.

#	Field	Type	Format	Description
1	Station Number	character	x(4)	Unique identifier of workstation making request.
2	Transaction Number	integer	99999999	Unique transaction ID for request.
3	API Command Code	integer	999	IGT System API command code.
4	Return Code	character	x(4)	IGT System return code.

Table 3: ACK Header Received from IGT System

3.1.1.4.1 API Command Code Field

In all commands, the IGT System takes the API command code value sent by the workstation, adds 100 to it, and returns this value to the workstation. For example, if the workstation sends a command code 28 (POS Redeem Points) to the IGT System, the API command code field is set to 028. When the IGT System responds, the API command code field is set to 128.

3.1.1.4.2 Return Code Field

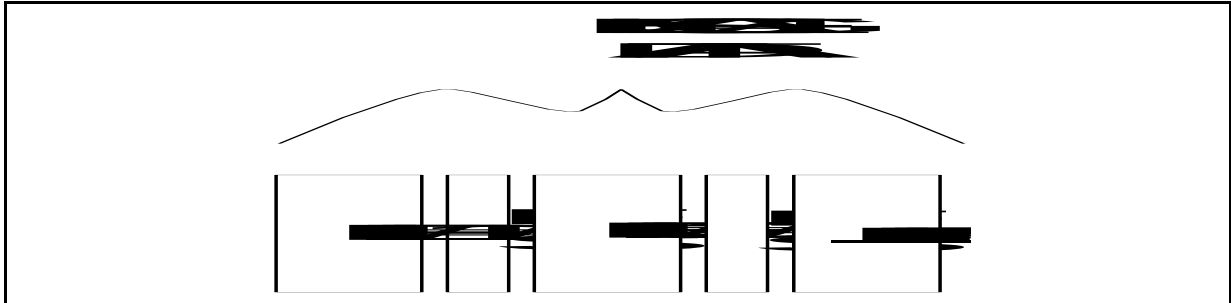
If the response is successful, the Return Code is set to zero. See the individual command sections for details. A nonzero value for Return Code indicates that an error has occurred. In this case, no extra fields accompany the header. The error values for Return Code depend on the command type. Optional message text may follow the Return Code field. See the individual command sections for details.

3.1.1.5 Message Data Block Format Used by IGT Systems Commands

Each field and message data block is variable in length. The message data block format is composed of multiple fields and each individual field is separated by a Field Separator (FS=TAB: Horizontal tab – ASCII 9). The message data block can be a variable length up to a 4096 byte maximum. The ASCII control character (Line feed – CHR (10)) serves as a data field lead-out character that identifies the end of the message data block.

The following field formatting considerations apply when creating and parsing the record data:

1. If a field has no value assigned to it, a Field Separator with no data can be used.
2. The field size can be less than the defined maximum field size; all fields are treated as variable length.
3. A final field separator is not necessary.



To allow for future enhancements without requiring programming changes to your communications programs, the Other Equipment Manufacturer (OEM) system should be able to receive message lengths of up to 4096 bytes. IGT Gaming Systems will add new fields only to the end of each message, keeping the layout of the existing message unchanged.

3.1.2 Command Code 20 (POS) – Patron Balance Inquiry

This function can be used to request point balance information about a patron.

3.1.2.1 Data Fields Sent to the IGT System

No	Field	Type	Format	Description
7	Card or Member Number	character	Up to x(40)	Card Number or Member Number
8	Attendant	character	x(8)	Operator ID (will be validated by the IGT System)
9	Request Type Method	character	X(1)	C (Card Number) or M (Member Number)

Table 7: Patron Balance Inquiry – Data Fields Sent to the IGT System

3.1.2.2 Data Fields Returned from the IGT System

If the transaction is a success, Return Code is set to zero. The rest of the message is as follows:

#	Field	Type	Format	Description
5	Membership ID	character	Up to x(40)	Membership Number
6	Patron Name	character	x(120)	Patron name
7	Patron Points	integer	999999999	Available point balance (points)
8	Membership Class	character	x(40)	Member class
9	Membership Tier	character	x(16)	Member tier (Example: Diamond, Emerald & etc) Note: A code “nocateg” will be returned if no member tier set-up in IGT System.
10	Date-of-Birth	date	dd/mm/yyyy	Patron’s date of birth (for confirmation of identity)
11	Member Status	integer	99	Refer to table 9 for values:
12	Gender	character	x	M or F
13	Member PIN#	character	x(6)	Member’s PIN number (may be blank if not used)
14	Patron Site ID	Integer	9999	Patron’s home site ID

Table 8: Patron Balance Inquiry – Data Fields Returned from the IGT System

3.1.2.3 Member Status Codes

Status Code	Description
0	Unknown, no status has been set
1	Introduced, member has just been introduced to the club
2	Nominated, member has been approved but is currently un-financial
3	Financial, approved and paid fees
4	Renewal, in the renewal period await fee payment
5	Lapsed, fees not paid during the renewal period
6	Suspended, patron has been suspended by the club
7	Banned, patron has been banned by the club (requires Re-Introduction)
8	Rejected, this patron’s membership application was rejected
9	Re-Introduced, this patron has re-applied for membership
10	Deceased, the patron has passed away

Status Code	Description
11	Pending Approval, financial member waiting for board approval
12	Archived, after Banned, Lapsed or Deceased
13	Resigned, member has resigned (requires Re-Introduction)

Table 9: Patron Balance Inquiry – Member Status

3.1.2.4 Return Codes

If the transaction encounters an error condition, the IGT System host returns only the ACK header. The Return Code value can be the following:

Return Code	Description
1	Conversion or format error
2	Invalid station ID
3	Invalid command code
4	Invalid access key
5	Invalid member card number
6	Duplicate request
7	Patron is on hold
8	API interface configuration or data validation failure
14	Invalid attendant
15	Not a registered member of the club

Table 10: Patron Balance Inquiry – Return Codes for Command Code 20 (POS)

3.1.3 Command Code 28 (POS) – Redeem Request

This function is used to settle POS transaction with points. It is also used to process redemption reversals by specifying a negative 'Points Redeemed' value.

3.1.3.1 Data Fields Sent to the IGT System

#	Field	Type	Format	Description
7	Card or Member Number	character	Up to x(40)	Card Number or Member Number
8	Attendant	character	x(8)	Operator ID (will be validated by the IGT System)
9	Points Redeemed	integer	999999999-	Total points redeemed, negative for reversal
10	Redemption Type	character	x(1)	(P=points) Only points can be used.
11	Reference Code	character	x(12)	Reference number supplied by workstation. Typically set to POS check number or Folio reservation number.
12	Request Type Method	character	X(1)	C (Card Number) or M (Member Number)

Table 11: Redeem Request – Data Fields Sent to the IGT System

3.1.3.2 Data Fields Returned from the IGT System

If the transaction is a success, Return Code is set to zero. The rest of the message is as follows:

#	Field	Type	Format	Description
5	Membership ID	character	Up to x(40)	Membership Number.
6	Patron Name	character	x(120)	Patron's name
7	Point Balance	integer	999999999	Available point balance (gaming and loyalty)
8	No longer used			
9	Membership Tier	character	x(16)	Member tier (Example: Diamond, Emerald & etc) Note: A code "nocateg" will be returned if no member tier set-up in IGT System.
10	Date-of-Birth	date	dd/mm/yyyy	Patron's date of birth (for confirmation of identity)
11	Points Redemption Value	integer	999999999	The number of points redeemed from the patron.
12	Patron Site ID	Integer	9999	Patron's home site ID

Table 12: Redeem Request – Data Fields Returned from the IGT System

3.1.3.3 Return Codes

If the transaction encounters an error condition, the IGT System host returns only the ACK header. The Return Code value can be the following:

Return Code	Description
1	Conversion or format error
2	Invalid station ID
3	Invalid command code
4	Invalid access key
5	Invalid member card number
6	Duplicate request
7	Patron is on hold
8	API interface configuration or data validation failure
9	Redemption points value exceeds available limit
10	Insufficient points
11	Invalid transaction type (Note: P=points is the only valid value).
14	Invalid attendant
15	Not a registered member of the club

Table 13: Redeem Request – Return Codes

3.1.4 Command Code 30 (POS) – Post Retail Points Accrual Request

This function is used to post a player rating record that was generated due to a retail purchase. It is designed so that points can be awarded to players for retail activities. It is also used to process accrual reversals by specifying a negative 'Points Accrued' value.

3.1.4.1 Data Fields Sent to the IGT System

#	Field	Type	Format	Description
7	Card Number or Member Number	character	Up to x(40)	Card Number or Member Number
8	Attendant	character	x(8)	Operator ID (will be validated by the IGT System)
9	Points Accrued	integer	99999999-	Points accrued, negative for reversal
10	Request Type Method	character	X(1)	C (Card Number) or M (Member Number)

Table 14: Post Retail Points Accrual Request – Data Fields Sent to the IGT System

3.1.4.2 Data Fields Returned from the IGT System

If the transaction is a success, Return Code is set to zero. The rest of the message is as follows:

#	Field	Type	Format	Description
5	Membership ID	character	Up to x(40)	Membership Number
6	Patron Name	character	x(120)	Patron name
7	Point Balance after Accrual	integer	999999999	Available point balance after accrual transaction (both gaming and loyalty)
8	No longer used			
9	Membership Tier	character	x(16)	Member tier (Example: Diamond, Emerald & etc) Note: A code “ nocateg ” will be returned if no member tier set-up in IGT System.
10	Date-of-Birth	date	dd/mm/yyyy	Patron’s date of birth (for confirmation of identity)
11	Patron site ID	Integer	9999	Patron’s home site ID

Table 15: Post Retail Points Accrual Request – Data Fields Returned from the IGT System

3.1.4.3 Return Codes

If the transaction encounters an error condition, the IGT System host returns only the ACK header. The Return Code value can be the following:

Return Code	Description
1	Conversion or format error
2	Invalid station ID
3	Invalid command code
4	Invalid access key
5	Invalid member card number
6	Duplicate request
7	Patron is on hold
8	API interface configuration or data validation failure
12	Invalid points accrual amount
14	Invalid attendant
15	Not a registered member of the club

Table 16: Post Retail Points Accrual Request – Return Codes

4.0 IGT Systems Gateway

4.1 Overview

Interface to IGT System must use sockets (TCP). The IGT System will act as a TCP server while POS server will act as TCP clients on an IP network. It will use a unique port number for TCP connection and listen for connection. The interface will use TCP/IP as the method of exchanging messages. The content of the messages will be in text.

4.2 Intended Audience

This document is intended for IGT development engineers and any non-IGT development engineers where an NDA exists between IGT and the non-IGT company.

4.3 TCP Protocol

The IGT Systems TCP protocol requires a remote client to explicitly address the database server machine (or host) on which the server runs. In a TCP network, you must use the Host Name (-H) startup parameter to specify the host address. The -H value is the name assigned to the database server machine in your TCP/IP hosts file.

4.4 Packet Layout

All packets from the IGT System to the remote system or from the remote system to IGT System have the same packet framing. All packets have the following format: MESSAGE DATA, LINE FEED

MESSAGE DATA

Up to 16,378 bytes of data may be in a packet. The message data may contain any characters other than LINE FEED or NULL.

LINE FEED

The ASCII control character (end of text – CHR (10) – Line feed) serves as a data field lead-out character that identifies the **end of the message data block**.

5.0 Glossary

Term	Definition
ACK	Acknowledge
API	Application Interface
FS	Field Separator
IP	Internet Protocol
ISO	International Organization for Standardization
NDA	Non Disclosure Agreement
OEM	Other Equipment Manufacture
TCP/IP	TCP/Internet Protocol